DOCUMENT RESUME

ED 186 761 CE 025 422

AUTHOR Heddesheimer, Janet C.
TITLE Vocational Education and Mid-Career Change. Information Series No. 198.
INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C.
BUREAU NO 498NH90003
PUB DATE 80
CONTRACT 300-78-0032
NOTE 36p.
AVAILABLE FROM National Center Publications, The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Rd., Columbus, Ohio 43210 ($2.80)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adults; *Career Change; *Career Counseling; Career Development; *Delivery Systems; Educational Resources; *Educational Strategies; Individual Characteristics; Individual Needs; Research Needs; *Vocational Education

ABSTRACT

This monograph on vocational education and mid-career change represents an attempt to survey the diverse points of view concerning modes of service delivery to adults making mid-career changes. In addition, this paper describes the characteristics of those who make changes in mid-career, provides an overview of career development theory, discusses the needs of mid-career changers, and provides information on available strategies and resources to serve mid-career changers. Finally, the implications for research and practice are discussed. (BM)

Information Series No. 198

VOCATIONAL EDUCATION AND MID-CAREER CHANGE

written by

Janet C. Heddesheimer

George Washington University

National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio
1980

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

FUNDING INFORMATION

Project Title:	National Center for Research in Vocational Education; Knowledge Transformation Project
Contract Number:	OEC-300-78-0032
Project Number:	498 NH 90003
Educational Act Under Which the Funds Were Administered:	Education Amendments of 1976, P.L. 94-482
Source of Contract:	Department of Health, Education, and Welfare United States Office of Education Bureau of Occupational and Adult Education Washington, DC
Project Officer:	Paul Manchak
Contractor:	The National Center for Research in Vocational Education The Ohio State University Columbus, Ohio 43210
Executive Director:	Robert E. Taylor
Disclaimer:	The material for this publication was prepared pursuant to a contract with the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Office of Education position or policy.
Discrimination Prohibited:	Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Therefore, the National Center for Research in Vocational Education, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must operate in compliance with these laws.

CONTENTS

	Page
FOREWORD	v
INTRODUCTION	1
SOURCES OF CURRENT INTEREST	1
MID-CAREER CHANGERS	2
Populations Affected	2
Characteristics of Mid-Career Changers	5
CAREER DEVELOPMENT THEORY	6
Super	7
Ginzberg	7
Holland	8
Tiedeman	8
Summary	9
NEEDS OF MID-CAREER CHANGERS	9
Accessibility	9
Training	10
Financial Assistance	10
Information	11
Counseling	11
Transferability of Skills	13
Study Skills	14
Job Search and Placement	14
ASSISTING WITH CAREER CHANGE	15
Educational Services	15
Business and Industry	16
Federal Government	16
Community-Based Programs	18
Gaps in Service Delivery	18
Proposed Models	19
Print and Nonprint Media	21
IMPLICATIONS FOR RESEARCH AND PRACTICE	21
Implications for Practitioners	21
Implications for Research	23
CONCLUSION	24
REFERENCES	25

FOREWORD

For some time, middle age was regarded as a period of economic and personal stabilization. With the rapidly changing social and economic outlook in this country, however, middle age is no longer seen as such a predictable period in an individual's life. Many factors can make midlife a period of considerable change. In many cases, occupational shifts are necessitated. As adults in career transition are becoming more visible and more numerous, vocational educators are becoming increasingly aware of the need to develop special educational and training programs for them. Research and practice have shown that adults in transition have different characteristics from youth and require a different mix of services and modes of delivery.

The growing importance of mid-career changers is shown by the development in 1973 of a joint position paper by the American Vocational Association and the National Vocational Guidance Association, recognizing that career development continues throughout life and does not simply end once an individual reaches adulthood. In light of the increasing recognition being accorded to adults in transition, this paper discusses the various categories of mid-career changers and their characteristics and needs, as well as programs provided to meet those needs. Weaknesses in present programs are considered and proposed models for service delivery are discussed. Finally, implications of mid-career change for future research and practice are outlined.

"Vocational Education and Mid-Career Change" is one of three benchmark monographs produced during the second year of the National Center's knowledge transformation program. Papers in each topic area are intended to communicate knowledge and, where appropriate, suggest applications. This series should be of interest to all vocational educators, including administrators and policy makers, federal agency personnel, researchers, and the National Center staff.

The profession is indebted to Dr. Janet C. Heddesheimer for her scholarship in preparing this paper. Recognition is also due Dr. Ruth P. Hughes, Iowa State University; Dr. Paula Robbins, Fitchburg State College; and Mr. Gonzalo Garcia, the National Center for Research in Vocational Education, for their critical review of the manuscript. Dr. Carol P. Kowle supervised publication of the series. Mrs. Ann Kangas and Mrs. Margaret Starbuck assisted.

Robert E. Taylor
Executive Director
National Center for Research in
Vocational Education

INTRODUCTION

The concept that many people in middle age require continued education and vocational counseling, just as children and youth do, is not new. The amount of attention given to this older population, however, has increased in the last decade.

The assumption that individuals settle into a stable career pattern by their middle thirties (Super, 1957) and no longer require vocational education services has been successfully challenged. The literature shows that as mid-life adults wrestle with career changes, either voluntary or involuntary, they have a range of needs. Mid-life adults may seek opportunities for training, information about jobs and educational options, financial support, and counseling services. Those who work with adults agree that mid-career changers can and do benefit from support services and educational opportunities, but there is no consensus on the services needed or on the most effective means of delivering services.

This paper represents an attempt to survey the diverse points of view concerning modes of service delivery to adults making mid-career changes. In addition, it describes the characteristics of those who make changes in mid-career. Information is provided on available strategies and resources to serve mid-career changers. Finally, the implications for research and practice are discussed.

SOURCES OF CURRENT INTEREST

Interest in mid-career changers stems from a variety of social causes. A key factor has been increasing interest in adult development and aging, as reflected in the popularity of Sheehy's Passages: Predictable Crises of Adult Life (1974) and Levinson's The Seasons of a Man's Life (1978). Concern with adult development has included a focus on the vocational aspect. Researchers have been examining the characteristics which distinguish the vocational development of adults from that of others at various stages of the life cycle, although no definite conclusions have been drawn (Ginzberg, 1972; Herr and Cramer, 1979).

Adults have also become more visible in areas of our society usually reserved for the young. For example, large numbers of middle-aged adults are pursuing education at levels ranging from the community college and technical institute to graduate and professional schools (Young, 1978). Many of these adults are seeking additional training to upgrade existing skills or retrain for a new field. Such training has become necessary as

technological change in society has resulted in growth in some segments of the economy and contraction in others, forcing workers to acquire new skills as existing skills become obsolete.

Changing family patterns also affect the vocational development of adults. A significant number of displaced homemakers and other women entering the work force for the first time or reentering need help in the form of training and vocational guidance. Early completion of families also frees both men and women to pursue new career options.

Another social trend is the growing number of individuals who retire in their forties and fifties. Despite continuing difficulties with pension systems, many individuals do have pension rights at an early age, including military and federal government employees. Early retirees are free to pursue emerging vocational interests through additional training or to reenter the job market in a lower level position. Changing attitudes on the part of society as a whole account for greater recognition of the needs of middle-aged adults and greater willingness on the part of middle-aged adults to make vocational changes. Hiestand (1971) has noted a subtle shift in the attitude of society in general that condones greater freedom for the middle-aged. Mid-life unemployment is another significant factor in career change. The middle-aged adult is more likely to have difficulty obtaining a new job and is often more likely to have skills that are obsolete. The need for retraining and job placement assistance for unemployed middle-aged adults is evident (Sexton, 1977). Worker dissatisfaction in midlife has also become an important social concern (Blau, 1978; de Vries, 1978; Sheppard, 1972). Recognition of worker dissatisfaction has resulted in a focus on providing opportunities for acquisition of new skills and restructuring of jobs so that they provide more satisfaction for the adult worker.

The passage of legislation and the establishment of federal agency priorities in relation to adult career changers reflect social change and the increased visibility of this population. In summary, a variety of social, economic, political, and psychological factors have resulted in a greater interest in mid-career changers.

MID-CAREER CHANGERS

Populations Affected

Mid-career changers are a diverse population and, as a result, are difficult to identify. There is no systematic way to estimate the numbers and characteristics of adults making mid-career changes.

One means of estimating the numbers of mid-career changers is to examine the rate of worker mobility, although studies on this topic often produce conflicting results. Byrne (1975) estimates that 9 percent of the work force changes jobs each year. Sommers and Eck (1977), on the other hand, estimate an overall worker mobility rate of approximately 30 percent or 34.6 percent for men and 27.2 percent for women. Both studies demonstrate, however, that job mobility decreases with age. Furthermore, the more individuals invest in education or training, the less likely they are to change fields.

In fact, some researchers have claimed that mid-life career change is not as extensive as the literature suggests. Arbeiter (1979b), for example, notes that the career mobility rate of employed Americans is low. He also emphasizes the decline in job mobility which occurs with age, citing Byrne's 9 percent estimate. According to Arbeiter, as people grow older, they tend to seek greater job security. He argues that the numbers of mid-life career changers will decline in the 1980s. Stern (1977) presents a similar point of view when he notes that in reality the current economic situation discourages occupational mobility. Even so, he indicates that interest in career change will continue due to an increased awareness of new vocational options and more time available to adults after their families have been raised.

Clearly, there are conflicting points of view on the size of the mid-career change population and on whether that population will increase or decrease. Statistics describing large aggregates of the population can be misleading. In addition, changes occur so rapidly that it is difficult to gather current data. The demand for and response to services for mid-career changers may be more useful indicators than studies of labor market trends.

Identifiable groups of mid-career changers include reentry women and displaced homemakers, those who are forced to seek different occupations because of outmoded skills or mandatory early retirement, those who are frustrated or dissatisfied with their work, and those who are seeking more satisfying work in line with changing needs and values. If the definition of mid-career changers is expanded to include career upgraders, or those who are preparing themselves for advancement in their careers (Paltridge and Regan, 1978), it appears that there is a sizeable population of adults in transition.

There is some disagreement over the terms and categories used to describe mid-life career changers. Some of the recently coined terms include "mid-career changer" (Paltridge and Regan, 1978), "adults in transition" (Arbeiter, Aslanian, Schmerbeck, and Brickell, 1978), and "shifters" (Clopton, 1973). These descriptors are meant to encompass individuals who make significant

occupational changes during middle life. The age range is usually thirty to fifty-five (Clopton, 1973; Pascal, Bell, Dougharty, Dunn, and Thompson, 1975), which excludes children and young adults establishing themselves in the work place, and older adults who are concerned about the transition from work to retirement.

A distinction is commonly made between those who are actively pursuing a career change and those who are considering a career change. Active pursuit is evidenced by such activities as looking for another job or entering a training program. The terms used to describe these subgroups include "active mid-career changers" as opposed to "potential mid-career changers" (Paltridge and Regan, 1978) and those who are in "actual transit" as opposed to those who are in "anticipatory transition" (Arbeiter et al., 1978). Another important distinction is made between voluntary and involuntary career change (Entine, 1977). Clopton (1973) prepared a classification system for types of mid-life career shifts based on his study of a group of twenty "shifters" who had actually made a career change and twenty "persisters" who stayed in their first career field despite a desire to change.

According to Clopton, Type A shifts result from major events that force individuals to make major occupational changes. These events can include loss of employment or a major shift in personal values. The impact of a "mid-life crisis" (Levinson, 1978; Mayer, 1978; Sheehy, 1974) would fit into this Type A shift. Type B changes result from dissatisfaction with an initial career choice. Type C changes occur when individuals realize that even though the initial vocational choice was satisfying, there is another occupation that could provide as much or more satisfaction.

What actually constitutes a mid-career change is not clear. There is no index for distinguishing between a job change that is the next step in an on-going career and a job change that represents a major redirection in an individual's career pattern. Gottfredson (1976) has proposed that Holland's (1973) classification system be used to differentiate major and minor career shifts. Those who remain in the same Holland category, even though they have changed jobs, would not be considered mid-career changers. Those who shift to another category would be designated changers. Bell (Pascal et al., 1975) has proposed an index of the extent of career redirection based on the magnitude of the "status change" and the requirement for retraining. According to Bell, "Both magnitudes will be small when previous experience is necessary and sufficient for the new job; when one or both are large, a radical redirection of career occurs" (p. 51).

Although [redacted] work of Gottfredson and Bell is helpful to mid-career change theorists, the more practical aspect of service delivery to mid-career changers must be considered as well. Schlossberg (1975) suggests that whether individuals are upgrading themselves in their original place of employment, seeking a different employer in the same field, or making a major shift in their field, the move represents considerable change. The change involves coping with new activities, new colleagues, new sets of expectations, and a changing self-definition. Therefore, the question is not whether it is a major or minor change, but what impact the shift has on the individual making it. The assumption in this paper is that the mid-life adult defines the magnitude of change represented by a shift.

Characteristics of Mid-Career Changers

Mid-career changers in the aggregate appear to have distinguishing psychological characteristics and life circumstances. It should be noted, however, that much discussion of the characteristics of mid-career changers derives from anecdotal accounts, although there is a growing body of research in this area.

There are two general reasons for career change. According to Entine (1977), impetus for change may be internal (psychological) or external (primarily economic). Psychological factors are linked to changes in individuals or their families. Externally based factors often relate to changes in the economy. Entine further suggests that reasons for change may be anticipated or unanticipated. Anticipated change allows more time for planning, whereas unanticipated change may create feelings of shock and helplessness over the inability to respond.

Career shifts may be the result of personality changes during adulthood or of common events in the work place. Erikson (1968), Levins (1978), and Vaillant (1977) discuss changes in priorities during adult life. Adults in the thirty-five to fifty age range may shift their priorities as a result of such family changes as divorce or an end to child rearing responsibilities. Ill or aging parents may represent new responsibilities and conflicts for mid-life adults who are anxious to have more time for their own pursuits. In other cases, mid-life adults may discover emerging interests and find that their interpersonal needs have changed as they have matured. Schlossberg (1978) has suggested that in middle age many men have a greater interest in meeting their needs to nurture others while women are more concerned with earning achievement in the work world.

In addition to such internal changes, mid-life adults may experience frustration on the job. Worker dissatisfaction has been recognized in all segments of the economy. Although a job may

provide an adequate income and security, it may be seen as meaningless work, as documented by Sheppard and Herrick (1972) in their study of blue-collar workers. Mid-life adults may feel a keen sense of disappointment when they begin to see a discrepancy between what they had hoped to accomplish and what they have actually achieved (de Vries, 1978). The urgency to change increases when mid-life adults realize the dwindling number of years remaining to establish themselves in a new occupation. A related factor in mid-life career changers involves the realization that they can no longer perform on the job either physically or psychologically. For example, military personnel, athletes, and dancers reach a point where they are barred from continuing in the occupation that has been a major part of their identity.

Motivation for career change, as indicated, derives from alterations in personality, personal life, or work role. As Roberts (1973) suggests, however, unless some preconditions for change are present and constraints are overcome, change is not likely to occur. For example, vocational change is necessary for those who must retire early or who are terminated. Other preconditions include the availability of mid-career change clinics, access to training and alternative careers, information about opportunities, and/or association with career changers.

Constraints center around accessibility, family circumstances, and attitudes toward self and work. Lack of access to vocational options and training opportunities can limit the ability to find appropriate new career directions. Family circumstances can limit the amount of time and money available to pursue needed training. Two common problems in the return to school are guilt over neglect of family responsibilities and difficulty in effective time management. Mid-life adults may believe it is too late to be socialized into a new occupation. They may also fear the loss of status and seniority that often accompanies a move to a new field. Clearly, there are many factors affecting mid-career change and the attitudes of mid-career changers. A sensibility for the complexity of the process of mid-career change and the factors behind the process is necessary in the provision of services to this population.

CAREER DEVELOPMENT THEORY

Career development theory has traditionally provided a framework for vocational counseling programs. Until recently, however, most theories of career development did not elucidate adult career development. Originally, Super's (1957) discussion of the stages of career development identified men as being in the maintenance stage by age forty-five. The assumption behind this

point of view was that few major changes occurred after this stage. Today, however, career development theory has changed to encompass all stages of the life cycle. This new perspective is reflected in a joint position paper on career development published in 1973 by the National Vocational Guidance Association (NVGA) and the American Vocational Association (AVA). According to the AVA-NVGA joint commission, career development continues throughout life. Alterations in one's vocational life must be seen in relation to changes in one's personal life. The dynamics of career change are best seen in terms of a summary of the key theories of career development. These theories suggest new approaches to helping adults make career decisions.

Super

Super (1957) was one of the first theorists to conceptualize specific stages in the career development process and to place these stages in the context of the changing demands of the life cycle. According to Super, career development is a reflection of self-concept. In line with Super's theory, it seems appropriate for adults in middle age to seek work experiences that reflect new or changing interests and values. In an updated version of Super's theory, Murphy and Burck (1976) note that since a career at midlife may no longer reflect self-concept accurately, a career shift may be necessary. In this sense, the search for a new career represents a search for self-renewal.

Super's concept of vocational maturity is also helpful in understanding the motivations of mid-career adults. He defines the concept of vocational maturity in terms of the degree of similarity between an individual's vocational behavior and the expected vocational behavior at that age. The use of strict age norms may not be appropriate for adults, but it may be appropriate to compare mid-career changers in similar situations to determine their relative level of maturity. This approach can facilitate the provision of assistance required for each level of vocational maturity.

Although Super has made an outstanding contribution to the understanding of career development, most of his research has been completed on men. He has described typical career patterns for both men and women, but many of his concepts have not been fully tested in relation to the career development of women.

Ginzberg

Ginzberg's concept of career development (Ginzberg, Ginsburg, Axelrad, and Herma, 1951) is similar to that of Super, in that vocational choice is seen as a process occurring in stages.

These stages consist of a series of compromises made between wishes and possibilities. The process is divided into the fantasy, tentative, and realistic periods. In the original formulation, Ginzberg et al. regarded these stages as irreversible and complete, with some exceptions, by age twenty-four. More recently, Ginzberg (1972) has described occupational decision making as an open-ended process that can coexist with an individual's work life. He speculates that if a desired level of satisfaction is not forthcoming from a job, or, if new career possibilities promise greater satisfaction, adults are likely to attempt a new choice. Clearly, Ginzberg has modified his viewpoint to reflect the changing outlook on career development in adulthood.

Holland

Holland's (1973) concept of vocational choice is one of the most common theories used in programs for mid-life career changers, as it was designed to encompass individuals of all ages. He stresses the notion that individuals have unique needs and attempt to satisfy their needs through occupational choice.

Holland has developed a matrix of personality types and a parallel set of environmental models to describe the characteristics of different work settings. A primary thesis is that individuals whose personality type is consistent with the model personality type in their work environment are likely to experience vocational satisfaction. This thesis helps to explain the discontent that many mid-life adults feel in their work. Personality changes that occur in midlife often mean that a job setting which formerly provided satisfaction is no longer congruent with the individual's changing needs and values. Holland's theory is used frequently because it is clear and relatively easy to translate into practice. In addition, two instruments developed by Holland, the Vocational Preference Inventory and the Self-Directed Search, are helpful in aiding adults in the identification of vocational possibilities consonant with their personality types.

Tiedeman

Tiedeman and O'Hara (1963) focus on occupational decision making, which they regard as a continuous process. According to this theory, individuals face a series of problems throughout life and go through two general stages in determining solutions: (1) anticipation or preoccupation, and (2) implementation and adjustment. This decision-making process should be directed by the individual. The decision-making model presented by these authors can be used to help individuals understand the stages they are going through in making a vocational choice.

Summary

A traditional weakness of career development theories is that they have focused on males almost to the exclusion of females. A considerable amount of research is underway to correct this deficiency, but more work needs to be done. Winkfield and Lowry (1977b) have reviewed some of the current attempts to explain the vocational development of women and note that recent efforts have focused on explaining the career patterns of women as well as their vocational choices. The emphasis in this research has been on the ways in which the career patterns of women differ from those of men and on the factors which account for the differences.

Mid-life career change is seen by many theorists from a developmental perspective, a view which serves a variety of purposes. Career changes in adults can be better understood in the context of other events in their lives. Career shifts are not isolated events, and career development is an ongoing process. Regarding career change as an opportunity for growth is especially important for involuntary changers. If the shift represents a potentially productive next step rather than a sign of failure, those making involuntary changes are less likely to be discouraged by the transition. Tiedeman has commented that "only people stop careers" (1975, p. 1). In other words, individuals control their own vocational destinies.

NEEDS OF MID-CAREER CHANGERS

A number of studies have been designed to assess the needs of mid-career changers and the educational and support services they require. Several different approaches have been used in these studies, including surveys of the adults themselves, suggestions advanced by educators offering programs for adults in transition, and proposals for service delivery based on adult career development theory.

Mid-career changers have a variety of needs for training and support services. Those specifically under discussion here include the need for accessibility to services, training opportunities to provide new career directions, information about career and training opportunities, vocational counseling, and job placement assistance.

Accessibility

A key aspect of accessibility is the willingness of an educational institution to provide support services for mid-career

changers. This may involve admission of older than usual students and acceptance of educational credentials which may be dated. Hiestand (1971) found that admissions policies often discriminated against older students entering professional and graduate schools. Many postsecondary institutions, however, actively seek out older students. The American Association of Community and Junior Colleges publishes Career Education in Community Colleges: A Sourcebook (1978), which lists programs targeted to adults making career changes. Lowther (1977) also identifies promising practices for adults in institutions of higher education, including counseling services, the rewarding of academic credit for life experiences, and extension programs.

For adults with family and work responsibilities, driving long distances to take advantage of training opportunities may present insurmountable problems; thus, geographic accessibility is a consideration in program development.

Training

In their study of adults in transition, Arbeiter et al. (1978) found that 60 percent of the sample planned additional education to acquire credentials necessary for career advancement or change. The majority of those planning additional education expressed interest in either a vocational or a professional program. Such findings are reinforced by the fact that a growing number of adults over thirty-five are returning to school (Young, 1978).

The design of a training program is critical for adults in transition. Adults may be particularly concerned that the program they have selected will lead directly to the area of employment they have chosen. Delays and false starts can be frustrating to those who feel they have a limited number of years to advance in their newly chosen career. It is critical that programs be individually tailored to the goals of the career changers. Robbins (1978) found that some men in her study of career changers needed only a few formal courses to effect a shift, while others needed a formal degree program. Program planners must identify the specific credentials required by a mid-career changer rather than focusing solely on completion of degree programs.

Financial Assistance

Many mid-life adults have heavy financial responsibilities that leave little room for additional training expenses. This is especially true of low-income adults and some members of minority groups. Even when financial support is available through the federal government or employers, many individuals are not aware that the support exists or do not know how to apply for it. One

recommendation made by the National Advisory Council for Women's Educational Programs in relation to programs for disadvantaged women was that the U.S. Office of Education prepare an inventory of federal programs offering financial aid to this population (Eliason, 1977).

Information

Arbeiter et al. (1978) found that adults in transition were primarily interested in information on available jobs, educational or training programs, sources of financial aid, and facts about personal abilities relating to educational success. Other studies have shown that many mid-career changers lack the most basic information about vocational options. Kane and Frazee (1979) found that less than one-third of the women they surveyed in vocational education programs knew about employment opportunities in occupational areas other than the ones in which they were being trained. They also found that most of the women surveyed had chosen their training and had made their vocational decisions before returning to school, while only 13 percent had participated in a career exploration program.

Such studies suggest that adults need information on jobs, training, and matching their skills and aptitudes to vocational options before actually selecting a new vocational area. Often, information services can be provided most appropriately in community settings other than educational institutions. The need for information is linked to the concept of accessibility. A study on The Status of Women in Two-Year Colleges (American Association of Community and Junior Colleges, 1977) recommended that information about the market place and educational institutions be made more available to students.

Counseling

Mid-career changers need assistance in making vocational decisions and in coping with the accompanying personal changes. Lowther (1977) observed that adult students need to understand not only the educational and vocational options open to them, but the risks and costs as well. A mid-career change can mean considerable emotional and economic risk as well as exciting possibilities. Counseling can help provide decision-making and job-finding skills, emotional support, and assistance in locating information. Through counseling, mid-career changers can coordinate and make full use of the other services provided to them.

Pascal et al. (1975) have developed a flow chart representing the process of mid-life redirection. Figure 1 shows counseling at the heart of the process. As the figure indicates, counseling assists in the move from the commitment to change to acting on the decision.

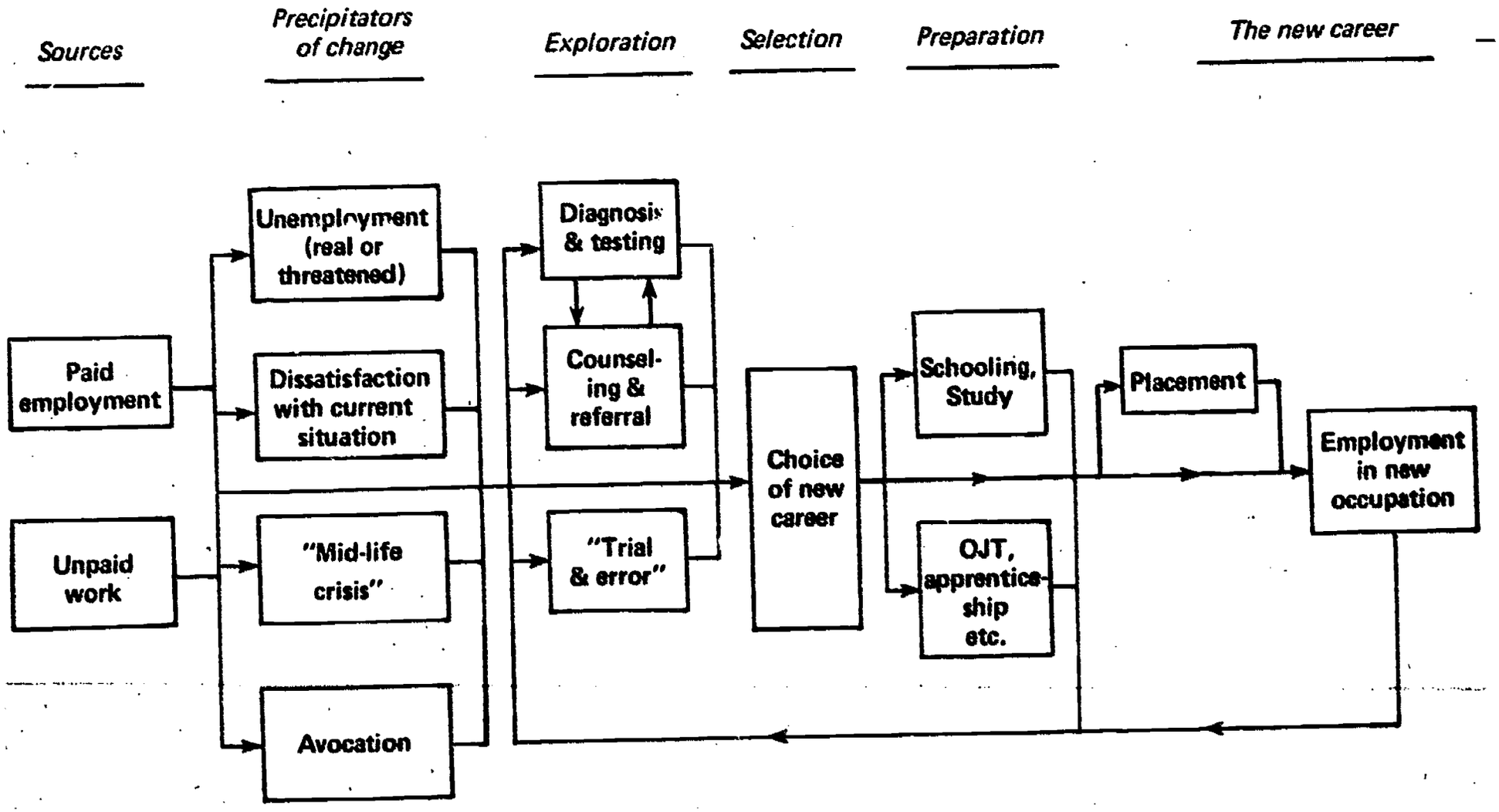

Figure 1. The process of mid-life career redirection.

SOURCE: Pascal, A.H.; Bell, D.; Dougharty, L.; Dunn, W.L.; and Thompson, V. *An Evaluation of Policy Related Research on Programs for Mid-Life Career Redirection.* 2 Vols. Santa Monica, CA: Rand Corporation, 1975, p.4. Prepared for the National Science Foundation, R-1582/1-NSF. Reprinted with permission of the Rand Corporation.

Most career planning models propose a blend of knowledge of the individual's values, personal/vocational goals, work history, skills and aptitudes, and family considerations with a knowledge of educational and vocational options. Career decision making involves selecting a vocational goal that meets the individual's personal needs and is realistic in light of job requirements.

In exploring the reasons why adults over thirty-five change jobs, Schlossberg (1975) notes that in any age group there are individuals at all levels of vocational maturity. According to Schlossberg (1975), vocational maturity refers to the ability of individuals to become involved "in the choice process" and to "make appropriate decisions by first considering expanding alternatives, then narrowing down the options" (p. 39). This definition suggests that once adults gain control of their vocational destiny, their skills can be used throughout life. The usual goal of career counseling programs is to assist individuals in increasing their level of vocational maturity so that they can make appropriate decisions throughout their lives.

A variety of counseling activities are appropriate for use with mid-career changers. Nero (1975) explored the dynamics of the transition from housewife to labor force participant. The counseling services requested by the women she surveyed are typical of the types of services offered to mid-career changers by many counseling centers. These included: (1) standardized tests of vocational interests and aptitudes; (2) up-to-date and accurate information on vocational opportunities and labor market projections and training opportunities in their geographic area; (3) opportunities to talk with other adults having similar experiences; (4) alternative strategies for problem solving; (5) personal counseling; and (6) workshops on such topics as assertiveness training, value clarification, strategies for decision making, time management, and interviewing skills. Counseling is central to most programs for mid-career changers. Effective counseling can be the key to helping adults take advantage of the options open to them.

Transferability of Skills

A source of frustration for many adults in transition is a lack of knowledge about how to transfer knowledge and skills acquired in the classroom, community, and home to the work world. This has been particularly difficult for reentry women and displaced homemakers, as many of their skills are developed through unpaid work in the home or community. Their experience may not be recognized as equivalent to similar skills acquired through paid employment.

As director of the Center for Women's Opportunities, Eliason highlights developments in research on transferable skills. In a recent address, she described two projects which focused on identifying and assessing skills women have acquired through life experiences and demonstrating that these skills are relevant to a variety of occupations and training programs (Eliason, 1979). The first is Project ACCESS, developed by the Educational Testing Service (ETS) and the American Association of Community and Junior Colleges (AACJC) with funding from the U.S. Office of Education's Bureau of Occupational and Adult Education. The second is Project HAVE Skills, developed by the Educational Testing Service with funding from the Women's Educational Equity Act Program. Another program along the same lines is the College Level Examination Program (CLEP) developed by the Educational Testing Service to allow adults to receive credit by examination for a variety of courses. Many institutions of higher education allow students to waive courses if they receive a passing score on the CLEP exam.

Study Skills

Adults who elect to return for formal training often need assistance in developing study skills. The adult women surveyed by Kane and Frazee (1979) indicated that they were handicapped because they had forgotten or had never learned how to study effectively. Difficulties in studying efficiently led to problems of inefficient time management and the inability to take full advantage of their training. Adults returning to classes may feel apprehensive about their ability to compete with younger students or they may feel the skills they have are rusty. Study skills programs can be important supportive services for these adults.

Job Search and Placement

Thompson (Pascal et al., 1975), found that provision of counseling and job information services was common in programs for mid-career changers. Eliason also listed several activities to help adults seek and locate specific job openings. Some of these activities include developing functional resumes; identifying potential employers and openings; identifying resource people who can lead to job openings; overcoming bias on the part of employers toward age, sex, and race; and learning how to conduct oneself in an employment interview.

ASSISTING WITH CAREER CHANGE

Programs designed to assist adults in transition frequently offer a combination of training and education, career counseling, and job placement and referral. Not all programs provide all three types of services and some programs are organized along different models. Many are created to reach specific groups of mid-career changers such as reentry women and displaced homemakers, those who have lost jobs because of economic shifts or who face mandatory or early retirement, and those who seek new career directions for the sake of personal growth or because of job dissatisfaction. Programs for mid-career changers are also located in a variety of settings, from storefronts to universities.

Educational Services

Educational institutions have been among the first organizations to furnish programs for mid-career changers. Several factors contribute to this phenomenon. First, adults are returning to school in large numbers (Young, 1978), which has led to the provision of specialized services for them. Second, in a time of declining enrollments on the part of younger students, educational institutions welcome adults and even recruit them. Third, community colleges often have mandates from their state legislatures to provide services for all citizens. Since community colleges have become increasingly important in recent years, they have helped promote education for adults.

Services for adults in educational settings consist primarily of counseling and job referral. Programs exist for both men and women, but centers designed specifically to meet the needs of women have grown rapidly during the last decade. Harrison and Entine (1976) examined the scope and dimensions of adult counseling programs in the country with an emphasis on programs for women, ethnic minorities, and mid-career changers. Many of these programs are located in educational institutions as well as in the community.

Two programs for adults in educational settings deserve particular mention. The first is one developed by Farmer at the University of Illinois at Champaign-Urbana (1976). It includes a computer-assisted counseling center for adults called the INQUIRY Center, and is geared to individuals making career changes or desiring reentry into the world of work but who are unaware of available educational or job opportunities. Other services the center offers are training in decision-making skills and help in locating information on one's own.

The second program involves a counseling center established by Entine (Harrison and Entine, 1976) at the State University of New York at Stoney Brook. This has been a prototype program designed to provide mid-career counseling for those who require it. The program consists in part of an eight-week course involving goal clarification, development of interest inventories, preparation of resumes, and learning job techniques. The center also provides workshops on such specific topics as value clarification, handling anxiety and stress, and career and life evaluation.

Other types of programs for adults in transition are reviewed by Robbins (1978). Examples include universities without walls, courses that focus on work in the community to explore career possibilities, degree programs based on contracts geared to students' personal learning requirements, and on-the-job training opportunities. Short-term certificate programs in community colleges also provide adults with the opportunity for training in marketable skills.

Business and Industry

Pascal et al. (1975) have noted that employer-based training has not been a major source of assistance to mid-career changers. They have found that companies have concentrated on retraining or updating their own employees. At the same time, many companies have developed internal career planning programs for their employees. Leibowitz (1979) notes that these programs usually fall into one of two categories: (1) personalized career planning, and (2) career management which is oriented toward the organization. The career planning programs assist employees in developing vocational and educational goals. The career management programs focus on the organization through such activities as performance evaluation and supervisor training. A number of corporations offer funding and in some cases, released time, for employees to pursue additional training in local educational institutions. In their survey of mid-career changers in seven communities, Paltridge and Regan (1978) found that employers played a major role in career counseling and provision of financial aid.

Federal Government

Most programs sponsored by the federal government are designed to aid the unemployed. Nelson (1975) notes that programs are developed on the basis of two assumptions, that skill conversion and retraining are required to get workers employed, and that jobs are available in some sectors of the economy for job seekers who have the necessary job-seeking skills.

One of the largest federal retraining programs was initiated under the Manpower Development and Training Act of 1962 (MDTA). The Comprehensive Employment and Training Act of 1973 (CETA) succeeded MDTA. This act provides training and job placement assistance through loosely developed and sponsored programs. States, cities, and counties receive direct grants under CETA to provide employment and training for the disadvantaged who are unemployed or underemployed, although the emphasis has shifted from employability problems of the disadvantaged to concern with unemployment generally (Sexton, 1977). CETA has also been a major source of funding for public service jobs and has subsidized vocational training programs for unemployed adults. Congress has also recently earmarked special CETA funds for services to displaced homemakers.

Another federal program which offers assistance to adults is the Work Incentive Program (WIN), available to recipients of Aid to Families of Dependent Children (AFDC). The current priority of this program is assisting the unemployed in finding jobs. If an individual is not immediately employable, the program also offers assistance in obtaining training.

The Career Information Systems Grants Program was initiated by the Department of Labor in 1974 to improve both the quality and the dissemination of information on employment and training. Educational Information Centers are also sponsored by the federal government as authorized by the Education Amendments of 1976. These centers are administered by the U.S. Office of Education, which provides seed money to each state to set up centers for those who have difficulty obtaining career information through the usual channels.

The Department of Labor has also funded a number of programs for women, such as Wider Opportunities for Women (WOW), which provides career information for women and seminars on developing career objectives and job finding techniques. Peer counseling and self-help techniques have also been a part of WOW's work. In addition, this program helps women find transportation, child care, housing, and legal counsel. The United States Employment Service (USES) is another service sponsored by the Department of Labor to provide job placement, occupational testing, local labor market information, counseling, and referral through more than 2,500 local offices (Employment and Training Program Highlights, 1978).

The federal government, through legislative mandates, provides funding for research and development programs that can benefit mid-career changers. Such agencies as the National Institute of Education, the Fund for the Improvement of Postsecondary Education, the U.S. Office of Education's Bureau of Occupational and

Adult Education, the Department of Labor, the Employment and Training Administration, and the National Science Foundation have all funded projects in the area of mid-career change.

Community-Based Programs

Heffernan and Macy (1978) of the National Center for Educational Brokering describe independent services in communities that function as intermediaries between adults and education and employment. Brokering agencies provide information assessment opportunities, advice, referral services, and advocacy. They offer activities for value clarification, life planning, coping with stereotypes, gaining admission to programs, and choosing career options. Such programs are sponsored through independent agencies, public libraries, community women's services, state and local governments, and inter-institutional arrangements.

The National Center for Educational Brokering has developed a national directory of brokering agencies. Jacobson (1979) also lists such centers in her summary of adult career advocacy programs.

Self-help groups offer another possibility for assistance to adults. One such group is 40+, an organization for individuals forty and over who are unemployed and have had an average income of at least $12,000 to $15,000 for the preceding five years. The organization provides counseling and workshops on job search strategies. A similar organization is Experience Unlimited for unemployed professionals. The Association of Technical Professionals is a group of engineers and technical personnel who develop job opportunities and counsel the unemployed. The major focus in self-help groups is on helping unemployed individuals to reenter the work force (Jacobson, 1979).

Gaps in Service Delivery

Despite a great deal of progress in providing education and training to mid-career changers, much remains to be done. A review of problems and areas of improvement can provide insights for future program planning.

Programs that concentrate on retraining without including adequate counseling, information, and job seeking services often fail to meet the needs of adults in transition. There are several reasons for this phenomenon. Many times, individuals entering training programs have not fully explored the options available before taking on additional training. They may discover at some point that they have made a poor choice of careers. In addition, without adequate job searching skills,

adults may not know how to obtain a position for which they are qualified. Finally, without adequate information on labor market needs before entering a program, adults can enter fields where the demand for workers is declining (Nelson, 1975; Pascal et al., 1975). Even when information is available, mid-career changers may not know how to access it. Dissemination remains a serious concern for program developers.

The location and timing of services is also important. For example, individuals in rural settings may be cut off from services. Innovative programs using mobile vans and telephone counseling are solutions to this problem (Clarenbach, 1977), but they are not widespread.

Difficulties remain in the coordination of efforts on the part of employers, educational institutions, and local and state governments. Paltridge and Regan (1978) found examples of outstanding coordination among the programs they surveyed, but they also found many aspects needing improvement. It is difficult to identify the right mix of services for each individual making a mid-career change. Arbeiter (1979a) has suggested a relationship between the readiness of an adult to switch careers and the type of counseling the individual finds most helpful. Individuals have a range of needs from information on job openings in a vocational area to the opportunity to explore a variety of vocational options. Even when the requirements of the individual are known, the resources may not be available. For example, the individual may require a specialized training program not available in that geographic area. Most individuals will have difficulty in putting together a coordinated package of services that includes financial aid, training, placement, and counseling.

Proposed Models

A number of models have been proposed for the improvement of existing services to mid-career changers. Pascal et al. (1975) have developed four possible models for pilot programs to assist adults in transition. These include: (1) counseling and referral centers, (2) vocational and diagnostic services, (3) new career training support, and (4) training services for new careers.

Counseling and referral centers represent a basic intervention strategy. They consist of a site for guidance and dissemination of information staffed by vocational counselors. The centers should be located in places accessible to all members of the community. The provision of vocational and diagnostic services is identical to the services provided by the counseling and referral center, with the addition of testing and diagnostic services.

Support of training activities for new careers would be provided to those seeking skill upgrading or career change. Grants would be provided to the mid-career changers to allow them to purchase training in the community. This feature would be similar to the services provided under the G.I. Bill. Mid-career changers would also be required to work with a counselor in developing a coherent program of activities, which would in turn be evaluated for adequacy in meeting the individual's own objectives. This type of program would be a form of vocational rehabilitation for adults in transition.

In terms of the provision of training services for new careers, the counseling center itself would offer instruction to clients. This type of center would be appropriate in locations where adequate training opportunities do not already exist or where massive displacement of workers has occurred so that vocational training institutions are overloaded. A variation on this concept would involve a nationwide network of Second Chance Centers to produce instructional packages for home use. These would include instruction in skill and content areas as well as in career and life planning and job search techniques.

When implemented, these four prototype programs should be evaluated in terms of their effectiveness in three dimensions: target group(s) served, program costs, and program consequences.

Paltridge and Regan (1978) also offer a model for provision of services to mid-career changers, based on their study of seven communities. After synthesizing their findings, they developed alternative models of ideal community organizations, focusing on the approaches they believed were transportable to a variety of settings. They contend that adult education and community services should always emphasize the needs of the consumer.

To insure the financial stability of the center, only necessary services should be provided. Ancillary services can be added when the local organization is capable of funding them. Services considered necessary include: (1) formation of a community organization concerned about new opportunities for adults; (2) provision of career counseling and information on educational programs; (3) a network of educational and training programs available locally; (4) distribution of information on available educational and counseling services to interested community members.

The community organization and the educational and training institutions must work together to provide these services. Community members would be responsible for developing community support. The community organization must work with institutions to develop appropriate training activities and aid in the development of outreach programs for disadvantaged neighborhoods and

rural communities. The educational and training institutions would be responsible for providing programs and establishing policies to encourage mid-career adults to seek training. Such policies and practices would include offering classes at convenient times, exploring possibilities for financial aid, and developing flexible admissions policies to allow mid-career adults with varying backgrounds to enter programs of their choice. Finally, educational institutions should explore all possibilities for nontraditional programs.

Paltridge and Regan (1978) present the Community Council Model as the most promising model for the provision of services to mid-career changers. Figure 2 shows that the central feature of this model is a council linked to the community by two advisory committees: one on manpower needs and employment opportunities, and the other on educational needs and programs. The model could be expanded to include a job placement and referral network. (Three other models of service delivery are also discussed in the report by Paltridge and Regan.)

Print and Nonprint Media

Many different types of materials are available to mid-career changers, including self-help books, directories of services, and films. Several of the publications in the reference section of this paper list available materials or provide suggestions on where to locate additional resources (Boren, McCally, Goldberg, and West, 1976; Entine, 1975; Ferrini and Parker, 1978; Harrison and Entine, 1976; Heddesheimer, Boren, and Terry, 1976; Herr and Cramer, 1979; Jacobson, 1979; Schlossberg and Entine, 1977; Schlossberg, Troll, and Leibowitz, 1978; Winkfield and Lowry, 1977b).

IMPLICATIONS FOR RESEARCH AND PRACTICE

Implications for Practitioners

A review of the literature on programs for adults in transition suggests a number of implications for the provision of educational, counseling, job referral, and placement services to individuals within this population. First, programs for mid-career changers must be targeted to specific groups. Those experiencing mid-career change are a heterogeneous group. Designing general programs to meet their needs is difficult. The most successful programs have been based on extensive needs assessments of the population to be served. Another key factor in effective service delivery is coordination of activities.

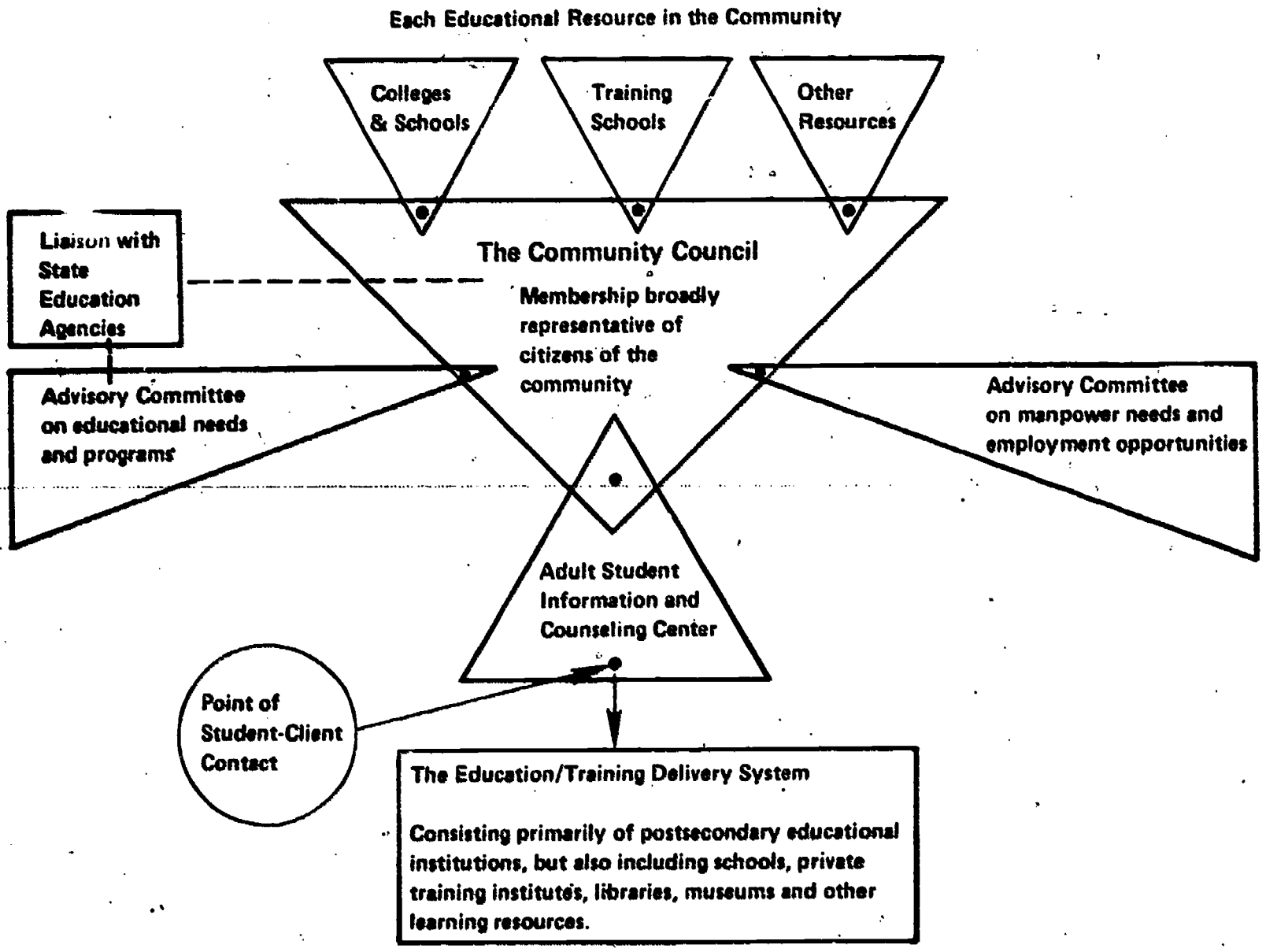

Figure 2. The Community Council Model.

SOURCE: **Paltridge, J.G., and Regan, M. C.** *Mid-Career Change: Adult Students in Mid-Career Transitions and Community Support Systems Developed to Meet Their Needs.* **Washington, D.C.: U.S. Department of Health, Education, and Welfare, September 1978, p. 72.**

This suggests a link between educational institutions and the work place. Accessibility to educational and counseling opportunities is also a primary consideration in program development.

Ongoing efforts must be made to provide up-to-date information on job possibilities, labor market projections, educational opportunities, and sources of financial aid. The program must also reflect an understanding of mid-life development on the part of administrators and planners. Instructional systems must be designed specifically for adults, and a variety of delivery systems can and must be used. The literature on adult learning documents the fact that adults require different learning experiences from children (Knowles, 1973). Educational programs should be designed for the convenience of the adult student. Support services, such as transportation and child care, are often important. The timing of programs and their physical location should be carefully planned. Once programs are planned, dissemination of information about programs is necessary.

Finally, constant monitoring of national and local shifts in the economy can help service providers anticipate the needs of adults. For example, knowledge that a local employer may be moving to a new community could alert a community-based career counseling center to the fact that a number of middle-aged adults may be in the job market.

Implications for Research

A major implication of the mid-career change literature for researchers is that further studies of the characteristics of mid-career changers are needed. Many of the existing studies are based on case studies or small sample sizes rather than on surveys of representative samples. Thomas (1975) has further suggested areas for research on the dynamics of mid-life career change. Some of these areas include: (1) the motivation of career changers; (2) the impact of career change on the middle-aged adult's identity; and (3) the effect of a move to a new environment on individuals when developmental psychology has suggested that work stabilizes an individual's personality.

Additional models for effective delivery of services to mid-career changers can and should be developed and creative approaches are needed to fill the gaps in service delivery. More evaluative studies of existing programs may be needed to identify strengths and weaknesses. The work on career development theory as it relates to women's careers also needs to be expanded. At the same time, attention should be devoted to the question of what, if anything, distinguishes the career development of ority group members.

A range of policy-related questions also emerge from the literature on mid-career change. Typical issues arising from the literature include the following: the role of the federal government in assisting mid-career changers; the extent of the problem raised by the vocational dissatisfaction of large numbers of mid-life adults; the questions of which group of mid-career changers should receive the greatest attention; and justifying interest in creating programs for mid-career changers in light of the actual numbers of individuals making such shifts.

CONCLUSION

An interesting aspect of the focus on adults in transition is that the nature of the services offered will depend on developments in many areas of our society. The economy determines the numbers of unemployed adults or the number of adults who regard the economy as safe enough to permit a career shift. Although the numbers of women in the work force have been increasing, it is not clear how many will move into nontraditional areas of employment. The availability of public money from federal, state, and local sources for research, development, and actual programs is also uncertain. Much can be learned from past and present studies on mid-career change, but much more needs to be known. The numbers of mid-life adults are growing, and there is every indication that programs to assist them will also continue to grow.

REFERENCES

American Association of Community and Junior Colleges. Career Education in Community Colleges: A Sourcebook. Washington, DC: American Association of Community and Junior Colleges, 1978.

American Association of Community and Junior Colleges. The Status of Women in Two-Year Colleges. Washington, DC: American Association of Community and Junior Colleges, 1977.

Arbeiter, S. "Arbeiter Looks at Adult Guidance." VocEd: Guidance Insider 54 (1979a): 30c-30d.

Arbeiter, S. "Midlife Career Change: A Concept in Search of Reality." Paper presented at the 1979 National Conference on Higher Education, Washington, DC: April 18, 1979b.

Arbeiter, S.; Aslanian, C. B.; Schmerbeck, F. A.; and Brickell, H. M. Forty Million Americans in Career Transition: The Need for Information. New York, NY: College Entrance Examination Board, 1978.

Blau, B. "Understanding Mid-Career Stress." Management Review 67 (1978): 57-62.

Boren, N., McCally, M., Goldberg, R., and West, T. Second Careers: A Model Program for Midcareer Change. Prepared under a grant from the Administration on Aging. Washington, DC: The George Washington University, 1976.

Byrne, J. J. "Occupational Mobility of Workers." Monthly Labor Review 98 (1975): 53-58.

Clarenbach, K. Educational Needs of Rural Women and Girls: Report of the National Advisory Council on Women's Educational Programs. Washington, DC: U.S. Government Printing Office, 1977.

Clopton, W. "Personality and Career Change." Industrial Gerontology 17 (1973): 9-17.

de Vries, M. F. R. K. "The Mid-Career Conundrum." Organizational Dynamics 7 (1978): 45-62.

Eliason, C. "The Importance of Research on Transferable Skills to Female Mid-Life Career Changers." Address given at the National Center for Research in Vocational Education, The Ohio State University, Columbus, OH: June, 1979.

Eliason, C. Neglected Women: The Educational Needs of Displaced Homemakers, Single Mothers, and Older Women. A report of the National Advisory Council on Women's Educational Programs. Washington, DC: American Association of Community and Junior Colleges, Center for Women's Opportunities, 1977.

Employment and Training Program Highlights: Facts for the Consumer. Washington, DC: U.S. Department of Labor, Employment and Training Administration, 1978.

Entine, A. D. "Counseling for Mid-Life and Beyond." The Vocational Guidance Quarterly 25 (1977): 332-336.

Entine, A. D. "Mid-Life Needs: Assessment and Responses." Paper presented at the meeting on New Careers at Mid-Life, Florida Technological University, Orlando, FL: 1975. ED 116 530

Erikson, E. H. Identity: Youth and Crisis. New York, NY: W. W. Norton and Company, 1968.

Farmer, H. "INQUIRY Project: Computer-Assisted Counseling Center for Adults." The Counseling Psychologist 6 (1976): 50-54.

Ferrini, P., and Parker, L. A. Career Change. Cambridge, MA: Technical Education Research Centers, 1978.

Ginzberg, E. "Toward a Theory of Occupational Choice: A Restatement." Vocational Guidance Quarterly 20 (1972): 169-176.

Ginzberg, E.; Ginsburg, S. W.; Axelrad, S.; and Herma, J. L. Occupational Choice: An Approach to a General Theory. New York, NY: Columbia University Press, 1951.

Gottfredson, G. Career Stability and Redirection in Adulthood. Baltimore, MD: Johns Hopkins University, 1976. ED 133 494

Harrison, L. R., and Entine, A. D. "Existing Programs and Emerging Strategies." The Counseling Psychologist 6 (1976): 45-49.

Heddesheimer, J. C. "Multiple Motivations for Mid-Career Change." The Personnel and Guidance Journal 55 (1976): 109-111.

Heddesheimer, J.; Boren, N.; and Terry, K. Y. Second Careers: Counseling for Mid-Career Change. Prepared under a grant from the Administration on Aging. Washington, DC: The George Washington University, 1976.

Heffernan, J. M., and Macy F. U. "National Directory of Adult Counseling Organizations." In P. I. Robbins, Successful Mid-Life Career Change: Self-Understanding and Strategies for Action. New York, NY: AMACOM, 1978.

Herr, E. L., and Cramer, S. H. Career Guidance Through the Life Span. Boston, MA: Little, Brown, and Company, 1979.

Hiestand, D. L. Changing Careers After Thirty-five: New Horizons Through Professional and Graduate Study. New York, NY: Columbia University Press, 1971.

Holland, J. L. Making Vocational Choices: A Theory of Careers. Englewood Cliffs, NJ: Prentice Hall, Inc., 1973.

Jacobson, M. D. Adult Career Advocates Training Project: An Interim Report. Evanston, IL: Northwestern University, 1979. (Prepared under Grant No. 7-0695-0, Department of Health, Education, and Welfare.)

Kane, R. D., and Frazee, P. Adult Women in Vocational Education: Reentrants and Career Changers. Arlington, VA: Rj Associates Inc., 1979.

Kidd, J. R. How Adults Learn. New York, NY: Association Press, 1973.

Knowles, M. S. The Adult Learner: A Neglected Species. Houston, TX: Gulf Publishing Company, 1973.

Knowles, M. S. The Modern Practice of Adult Education: Andragogy Versus Pedagogy. New York, NY: Association Press, 1970.

Leibowitz, Z. "The Workplace: A Frontier for Adult Career Development." VocEd: Guidance Insider 54 (1979): 30d-30f.

Levinson, D. J. The Seasons of a Man's Life. New York, NY: Ballantine Books, 1978.

Lowther, M. A. "Career Change in Mid-Life: Its Impact on Education." The University of Michigan School of Education Innovator 8 (1977): 1, 9-11.

Mayer, N. The Male Mid-Life Crisis: Fresh Starts after 40. New York, NY: Doubleday and Company, 1978.

Murphy, P. P., and Burck, H. D. "Career Development of Men at Mid-Life." Journal of Vocational Behavior 9 (1976): 337-343.

National Vocational Guidance Association. Guidelines for the Preparation and Evaluation of Career Information Media: Films, Filmstrips, and Printed Materials. Washington, DC: American Personnel and Guidance Association, 1971.

National Vocational Guidance Association-American Vocational Association. A Position Paper on Career Development. Washington, DC: American Personnel and Guidance Association, 1973.

Nelson, V. Adult Career Education as an Intervention Strategy in Mid-Career Crisis. Cambridge, MA: University Consultants, Inc., 1975. ED 135 995

Nero, S. A. An Exploratory Study of the Sociological and Psychological Impacts of Mid-Career Change for Women. Menomonie, WI: University of Wisconsin-Stout, 1975. ED 120 567

Neugarten, B. L., ed. Middle-Age and Aging. Chicago, IL: The University of Chicago Press, 1968.

Paltridge, J. G. and Regan, M. C. Mid-Career Change: Adult Students in Mid-Career Transitions and Community Support Systems Developed to Meet Their Needs. Washington, DC: Department of Health, Education, and Welfare, 1978.

Parnes, H. S.; Adams, A. V.; Andrisani, P. J.; Kohen, A. I.; and Nestel, G. The Pre-Retirement Years. Vol. 4. Washington, DC: U.S. Government Printing Office, 1975.

Pascal, A. H.; Bell, D.; Dougharty, L.; Dunn, W. L.; and Thompson, V. An Evaluation of Policy Related Research on Programs for Mid-Life Career Redirection. 2 Vols. (Prepared for the National Science Foundation, R-1582/1-NSF.) Santa Monica, CA: Rand Corporation, 1975.

Robbins, P. I. Successful Mid-Life Career Change: Self-Understanding and Strategies for Action. New York, NY: AMACOM, 1978.

Roberts, B. H. Mid-Career Change: Smoke or Fire? Florence Heller School, 1973. ED 128 741

Schlossberg, N. "Career Development in Adults." American Vocational Journal 50 (1975): 38-41.

Schlossberg, N. K., and Entine, A. D., eds. Counseling Adults. Monterey, CA: Brooks/Cole Publishing Company, 1977.

Schlossberg, N. K.; Troll, L. E.; and Leibowitz, A. Perspectives on Counseling Adults: Issues and Skills. Monterey, CA: Brooks/Cole Publishing Company, 1978.

Sexton, P. C. Women and Work. U.S. Department of Labor, R and D Monograph No. 46. Washington, DC: U.S. Government Printing Office, 1977.

Sheehy, G. Passages: Predictable Crises of Adult Life. New York, NY: E. P. Dutton and Company, 1974.

Sheppard, H. L., and Herrick, N. Q. Where Have All the Robots Gone?: Worker Dissatisfaction in the 70s. New York, NY: The Free Press, 1972.

Sommers, D., and Eck, A. "Occupational Mobility in the American Labor Force." Monthly Labor Review 100 (1977): 3-17.

Stern, B. E. Toward a Federal Policy on Education and Work. Washington, DC: U.S. Government Printing Office, 1977. ED 151 579

Super, D. E. The Psychology of Careers. New York, NY: Harper and Row, 1957.

Thomas, L. E. "Why Study Mid-Life Career Change?" The Vocational Guidance Quarterly 24 (1975): 37-40.

Tiedeman, D. V. Continuing the Development of a Career?: A Symposium. March, 1975. ED 126 369

Tiedeman, D. V., and O'Hara, R. P. Career Development: Choice and Adjustment. New York, NY: College Entrance Examination Board, 1963.

Vaillant, G. E. Adaptation to Life. Boston, MA: Little, Brown and Company, 1977.

Vetter, L.; Winkfield, P. W.; Lowry, C. M.; and Ransom, R. M. Career Planning Programs for Women Employees: A National Survey. Prepared under a grant from the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Columbus, OH: The Ohio State University, National Center for Research in Vocational Education, 1977.

Vetter, L.; Winkfield, P. W.; Ransom, R. M.; and Lowry, C. M. Career Planning Programs for Women Employees: Prototype Programs. Prepared under a grant from the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Columbus, OH: The Ohio State University, National Center for Research in Vocational Education, 1977.

Winkfield, P. W., and Lowry, C. M. Career Planning Programs for Women Employees: Annotated Bibliography. Prepared under a grant from the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Columbus, OH: The Ohio State University, National Center for Research in Vocational Education, 1977a.

Winkfield, P. W., and Lowry, C. M. Career Planning Programs for Women Employees: Review of the Literature. Prepared under a grant from the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Columbus, OH: The Ohio State University, National Center for Research in Vocational Education, 1977b.

Work in America. Cambridge, MA: The MIT Press, n.d.

Young, A. M. "Back to School at 35 and Over." Monthly Labor Review 102 (October, 1978): 53-55.